

Pre-Model Setup

Project Information

Project Name: _____

Facility Type: Freeway Arterial Downtown Network Intersection/ Interchange

Project Extents: _____

Analysis Extents: _____

Analysis Tool: _____ Why (optional) : _____

Analysis Years: Existing: Base Year: Design Year: _____

Data

	Provided by KYTC	Collected by Consultant	Notes
Existing Volumes	<input type="checkbox"/>	<input type="checkbox"/>	
Volume Data			
Volume Forecasts	<input type="checkbox"/>	<input type="checkbox"/>	
Vehicle Classification	<input type="checkbox"/>	<input type="checkbox"/>	
Speed Data	<input type="checkbox"/>	<input type="checkbox"/>	
Travel Time Data	<input type="checkbox"/>	<input type="checkbox"/>	
Origin- Destination Data	<input type="checkbox"/>	<input type="checkbox"/>	
Crash Data/ Incident Data	<input type="checkbox"/>	<input type="checkbox"/>	

Notes:

Model Development

Geometry Coding

- | | |
|--|------------------|
| <input type="checkbox"/> Lane geometry correct along all segment/ intersections | Roadway Segments |
| <input type="checkbox"/> Lane add/ lane drops coded according to best practices | |
| <input type="checkbox"/> Desired speed decision points coded at all entry segments to new facilities | |
| <input type="checkbox"/> Lane change/ emergency stop distances were increased appropriately | |
| <input type="checkbox"/> Intersection geometry segments coded correctly | Intersections |
| <input type="checkbox"/> Reduced speed areas coded for all turning movements | |
| <input type="checkbox"/> Conflict areas and/or priority rules coded | |
| <input type="checkbox"/> Intersection control elements (signal heads, stop signs, detectors) coded | |
| <input type="checkbox"/> Traffic signal timing timing match field data | |

Vehicle Routing/ Inputs

- Dynamic Assignment necessary?
- Vehicle routing is reflective of Origin-Destination patterns
- Vehicle Inputs correspond to routing decisions
- Vehicle Inputs/ Input Matrix demonstrate peaking patterns

Vehicle Composition

- KY default vehicle composition was used
- If not, why? Local data
- Other

Vehicle Speed Profiles

- KY default speed ranges were used
- If not, why? Local data
- Other

Driving Behaviors

- Transmodeler - Wiedemann 74 & 99 models used?
- Parameter values are within KY established ranges

Model Assumptions/ Notes:

Post- Model Development

Model Calibration

Calculated Number of Simulation Runs: _____

Multiple Simulation Runs _____

Random Seeding _____

Random Seeding Increment _____

Calibration Metrics

- Volume
- Speed
- Travel Time
- Delay
- Congestion (qualitative)

Compliance with Calibration Metrics

AM PM

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Unserviced Demand (Average) AM PM

Unserviced Vehicles | _____

Input Check

- Geometry matches existing conditions
- Signal timing matches existing conditions
- Routing decision
- Vehicle Composition matches KY default or project specific data
- Speed Profile's match KY default or project specific speed data
- Link Behaviors match roadway conditions
- Driving Behavior parameter ranges are within KY approved ranges

Results Metrics

- Volume/ Throughput
- LOS/ Delay
- Travel Time/ Speed
- Queue
- Other: _____

Model Review Comments: